SUPPORT FOR THE AMENDMENTS

This Amendment amends Claims 1, 15, 26 and 31. Support for the amendments is found in the specification and claims as originally filed. In particular, support is found in the specification at least at page 6, line 18 to page 7, line 11; page 8, lines 8-15; and Fig. 9. No new matter would be introduced by entry of these amendments.

Upon entry of these amendments, Claims 1, 4-7, 10-15, 18-20, 23-26, 29-31 and 34-36 will be pending in this application. Claims 1, 15, 26 and 31 are independent. Claims 7, 10-14, 20 and 23-25 are withdrawn from consideration pursuant to a Restriction Requirement.

REQUEST FOR RECONSIDERATION

Applicants respectfully request entry of the foregoing and reexamination and reconsideration of the application, as amended, in light of the remarks that follow.

The present invention is directed to a piston made of aluminum cast alloy having improved thermo-mechanical fatigue resistance.

Claims 1, 4-6, 15, 18-19, 26, 29-31 and 34-36 are rejected under 35 U.S.C. § 103(a) over U.S. Patent No. 4,434,014 ("Smith") in view of WO00/71772 ("WO-772") and "Aluminum standards and data 2003" page 1-6.

Smith discloses high strength, wear resistant, aluminum-silicon alloys in which "the microstructure must be essentially *eutectic*" but "in practice ... up to 10% of primary alpha-aluminum dendrites can be tolerated without an excessive decrease in properties" (i.e., *hypoeutectic* structure). Smith at title; abstract; column 4, lines 33-37. Sr is added as a modifier for making the eutectic silicon fine. Smith at column 5, lines 23-30.

WO-772 also discloses a *hypoeutectic* or *eutectic* Al-Si alloy. WO-772 at page 4, lines 16-17; page 6, lines 9-10. Sr is added an Al-Si modifier for making the eutectic Si fine. WO-772 at page 8, lines 16-18.

"Aluminum standards and data 2003" is cited for disclosing the addition of Na, Sr, Ca and/or P to 3xx and 4xx type Al-Si foundry alloys in order to modify the structure. Office Action at page 3, lines 5-8.

However, the cited prior art fails to suggest the limitation of independent Claims 1, 15, 26 and 31 that "the aluminum cast alloy has a *hypereutectic* structure".

Applicants advise that in the hypoeutectic or eutectic structures of Smith and WO-772, if P is also added, then the refining effect of Sr on the eutectic Si is decreased. Furthermore, because P affects the refinement of primary Si crystal, while Sr affects the refinement of eutectic Si, the utilities of P and Sr are different. Thus, there is no motivation to add the modifier P of "Aluminum standards and data 2003" to the hypoeutectic or eutectic structures containing the modifier Sr of Smith and WO-772 to reach the aluminum cast alloys featured respectively in Claims 1, 15, 26 and 31.

Because the cited prior art fails to suggest the limitation of independent Claims 1, 15, 26 and 31 that "the aluminum cast alloy has a *hypereutectic* structure", and there is no motivation to combine "Aluminum standards and data 2003" with Smith and WO-772, the rejection under 35 U.S.C. § 103(a) should be withdrawn.

Pursuant to M.P.E.P. § 821.04, after independent product Claims 1 and 15 are allowed, Applicants respectfully request rejoinder, examination and allowance of withdrawn method Claims 7, 10-14, 20 and 23-25, which include all of the limitations of product Claims 1 and 15, respectively.

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In view of the foregoing amendments and remarks, Applicants respectfully submit

that the application is in condition for allowance. Applicants respectfully request favorable

consideration and prompt allowance of the application.

Should the Examiner believe that anything further is necessary in order to place the

application in even better condition for allowance, the Examiner is invited to contact

Applicants' undersigned attorney at the telephone number listed below.

Respectfully submitted,

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